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**SYSTEM AND METHOD FOR PROVIDING IMPROVED SPECIFICITY  
FOR AUTOMATIC MODE SWITCHING  
WITHIN AN IMPLANTABLE MEDICAL DEVICE**

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**Abstract of the Disclosure**

Techniques for improving the specificity of automatic mode switching (AMS) are provided to prevent inappropriate mode switching and to ensure that mode switching is performed when needed. In one example, improved techniques for calculating a filtered rate interval (FARI) are provided, which help avoid inappropriate mode switching within devices that employ FARI in connection with the determination of the atrial rate. Also, techniques are provided for detecting atrial tachycardia and for distinguishing between a true tachycardia and a false tachycardia (such as pacemaker mediated tachycardia). The techniques described herein for detecting atrial tachycardia and for distinguishing between true and false tachycardia are advantageously employed in connection with AMS but may be used in other circumstances as well.

10 Techniques employed in conjunction with dynamic atrial overdrive (DAO) pacing are also discussed.

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